

VIA EMAIL

January 5, 2006

Ms. Tracy Babbidge, Assistant Director
State of Connecticut
Department of Environmental Protection
79 Elm Street
Hartford, CT 06106

Dear Ms. Babbidge:

Thank you for the opportunity to review the next draft of the Report to the Joint Committee of the Connecticut General Assembly on Diesel Emissions Reductions. The report provides an excellent overview of potential measures that Connecticut could take to further reduce levels of diesel PM emissions in the state as well as some additional measures that could address the two major sources of PM emissions in the state: home heating oil and wood burning.

The Engine Manufacturers Association (EMA) has the following additional comments on the document and some suggestions that should be added to the Overview and Summary to provide Members of the General Assembly with a more thorough understanding of the issues.

Page 2, Figure of Diesel Particle

The depiction of diesel particles as uniform spheres is not technically accurate. I have attached two examples from some recent publications of a better graphic of diesel particles. It would be preferable to replace the current figure with something similar to the attached.

Pages 2-3, Discussion of inventories and health effects

Throughout the introductory document there is a lot of discussion about PM2.5, Diesel Particulate Matter (DPM), Black Carbon (BC) and PM from other sources. However, the text often confuses or uses the terms interchangeably, and it is difficult for the reader to recognize the distinctions among the different PM terms and sources.

We recommend that these sections and discussion be reorganized so that the reader has a clear understanding of PM2.5 and the contribution of DPM to the entire inventory. It should also be clear that the health effects mentioned in the document are based on studies of PM and not specifically DPM. DPM does contribute to ambient PM, but there is no documented basis to imply that the health effects from DPM is any different from other ambient PM particles. This point is important as legislators make policy decisions and allocate resources.

Pages 6-8, Inventory Information

Figure 1 is very instructive in that it shows that DPM is a minor fraction of the state's inventory representing only 15% of annual PM emissions. This provides good evidence the major PM sources of home heating and wood burning should also be addressed. However, there are some conflicting inventory numbers used in the report. For example, while Figure 1 indicated that on-road diesel sources account for 5% of the inventory, other numbers indicate that diesel mobile sources are 7.5%. Recognizing that inventory numbers vary depending on the source of the information, the report should be checked for consistency and any discrepancies explained.

Page 15, Clean Fuels

Under Clean Fuels, the text in the table for CNG indicates that CNG results in emissions substantially lower than diesel fuels. Although this was historically true, it is no longer the case. Diesel and CNG emissions under the new EPA Heavy-duty On-highway regulations will be essentially the same, and there is some documented evidence that emissions of air toxics from CNG vehicles is actually higher than from new diesel vehicles. This fact needs to be corrected in the table.

Pages 17-22 – Diesel Reduction Strategies

There are a number of suggested or recommended strategies that involve state regulation of mobile source emissions. These include:

- Chip Re-flashing
- Mandatory Requirements for BAT for Construction Equipment
- Locomotive Emissions
- Marine Vessels

To the extent that Connecticut is considering legislative or regulatory action involving mandates, the state needs to examine whether it has authority to require such mandates. As you are aware, the Clean Air Act preempts states from adopting emissions standards or requirements over new mobile sources. In addition, there would need to be specific authorization for the state to adopt and implement controls over non-new mobile sources.

For the specific topics noted above, the table should indicate that there are questions regarding the state's authority to develop and implement regulations or mandates in for these sources. There also should be some statement in the report regarding the federal regulatory preemption issues and the legal difficulties involved with state's implementing mandates over mobile source emissions.